CDP-M70

SERVICE MANUAL

AEP Model
UK Model
E Model

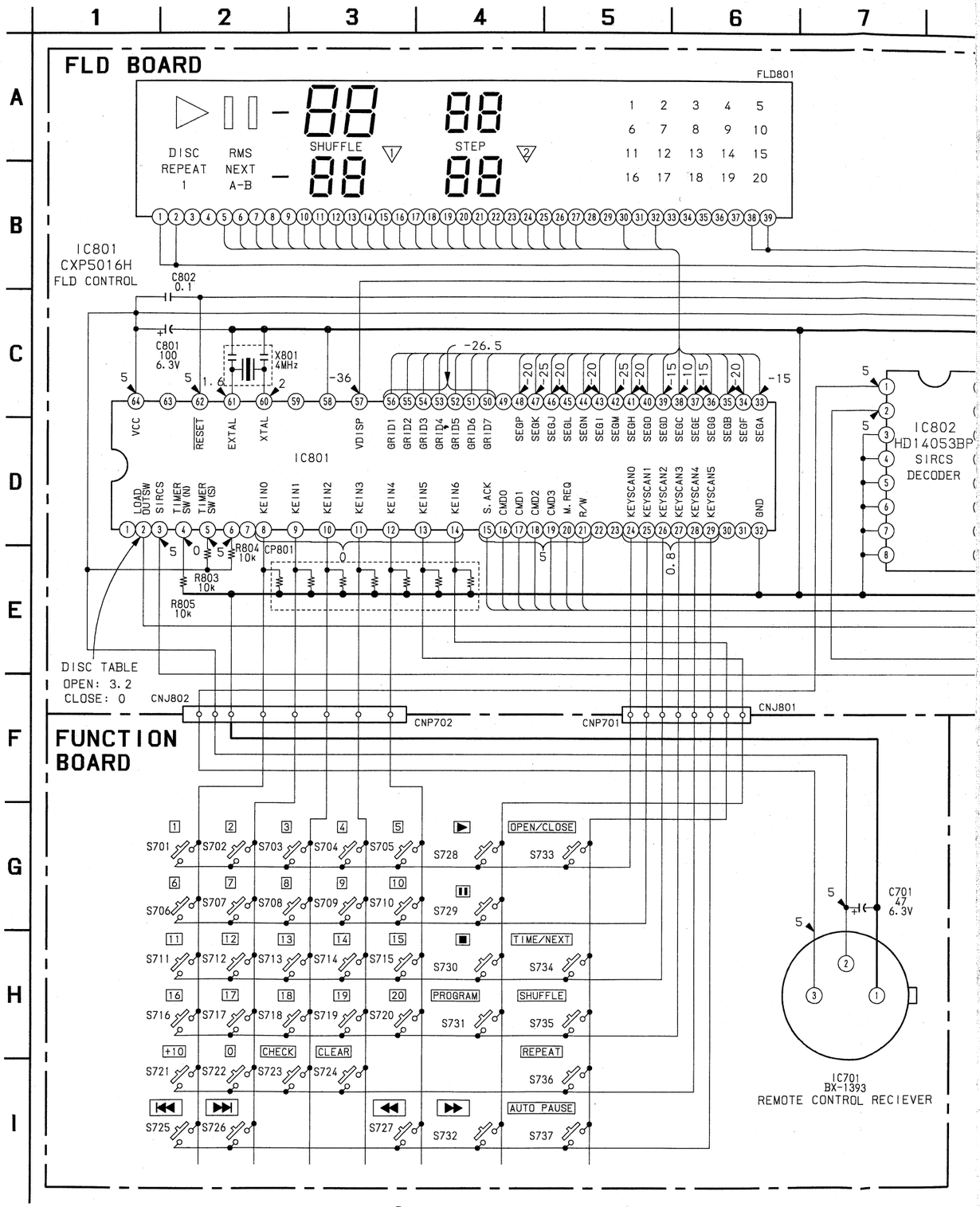
PRELIMINARY

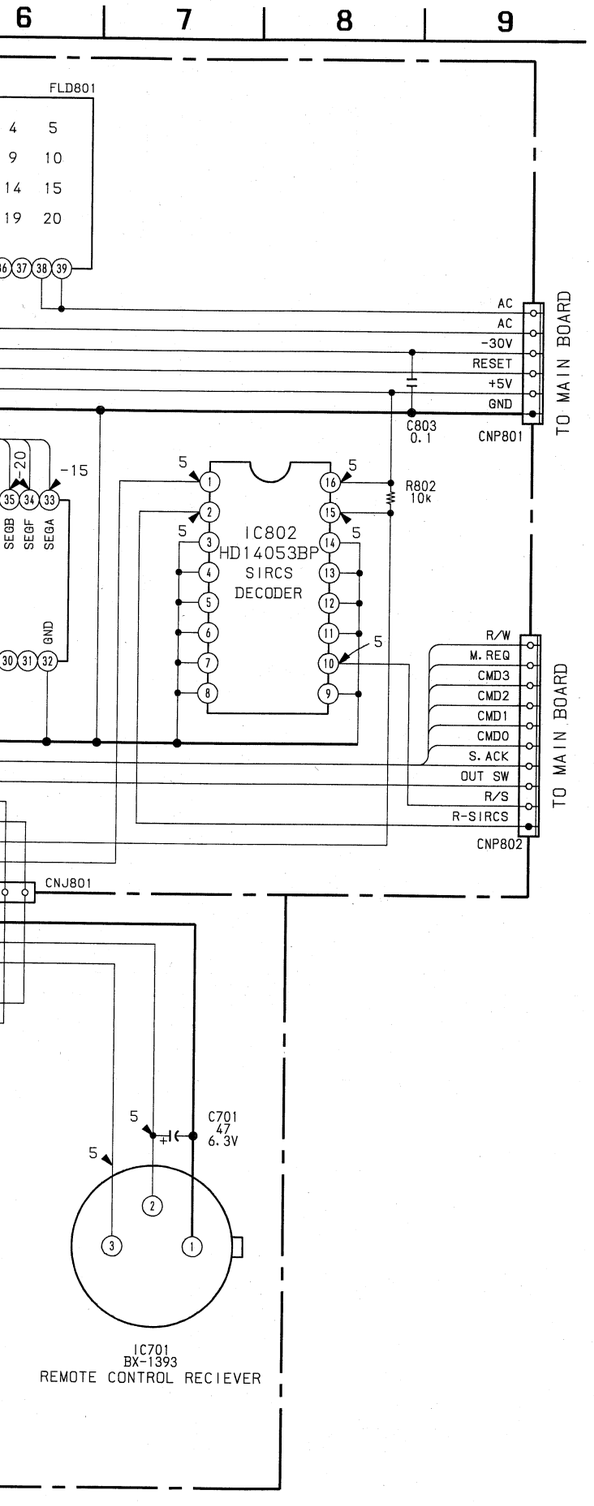
COMPACT DISC PLAYER

SONY®

AUD

DISPLAY SECTION SCHEMATIC DIAGRAM





- **Note on schematic Diagram.**

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- : fusible resistor.
- Switch

Ref. No.	Switch	Position
S1	LIMIT IN	OFF
S2	LOADING IN/OUT	IN
S601	DIGITAL OUT	OFF
S701	DIRECT MUSIC SEARCH 1	OFF
⋮	⋮	⋮
S720	DIRECT MUSIC SEARCH 20	OFF
S721	+10	OFF
S722	0	OFF
S723	CHECK	OFF
S724	CLEAR	OFF
S725	⏮	OFF
S726	⏭	OFF
S727	◀◀	OFF
S728	▶	OFF
S729	⏸	OFF
S730	■	OFF
S731	PROGRAM	OFF
S732	▶▶	OFF
S733	OPEN/CLOSE	OFF
S734	TIME/NEXT	OFF
S735	SHUFFLE	OFF
S736	REPEAT	OFF
S737	AUTO SPACE	OFF
S951	POWER	OFF
VS901	VOLTAGE SELECTOR	220-240V

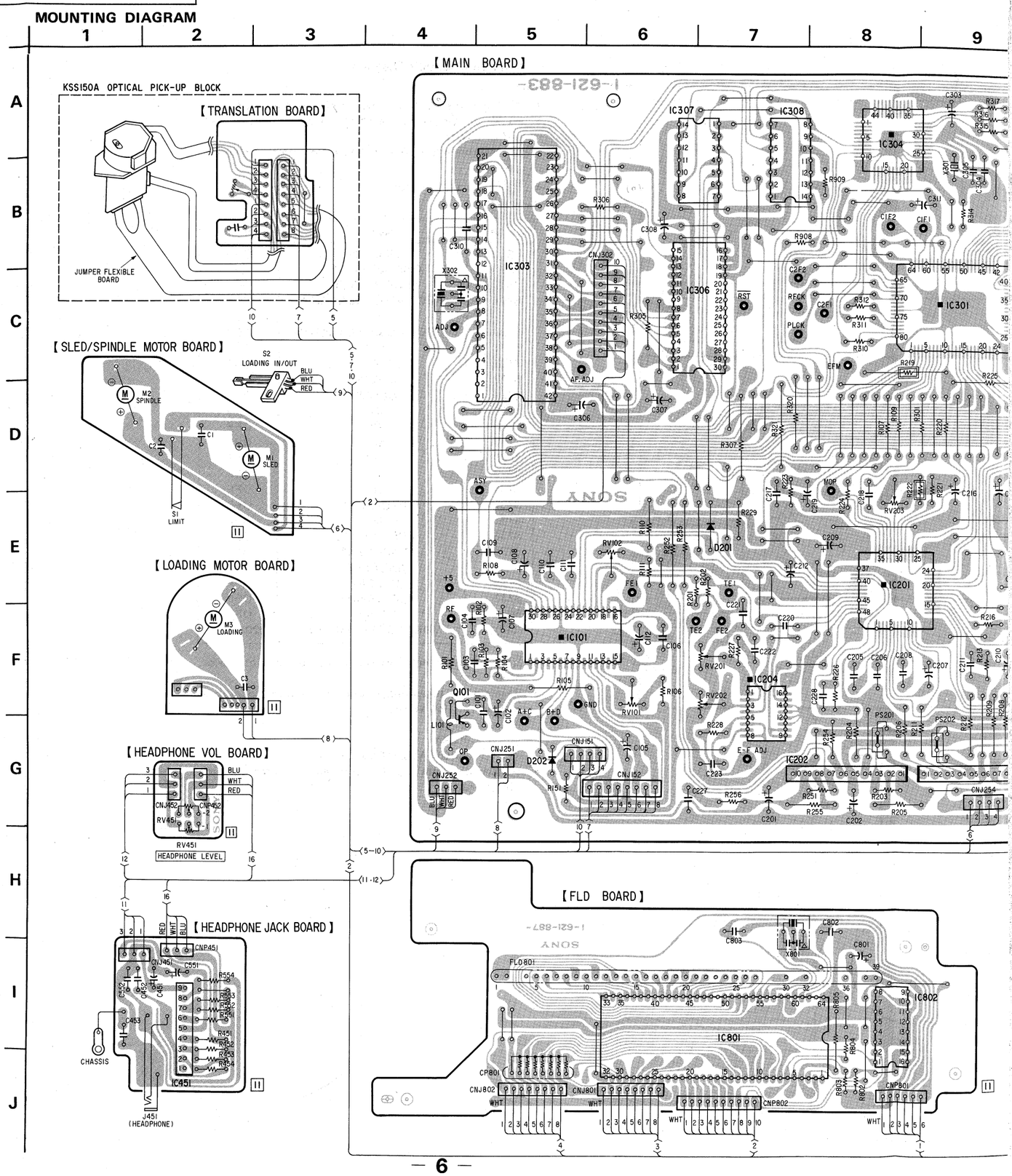
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal (detuned) conditions with a VOM (50 kΩ/V).
  no mark: STOP
  ( ) : PLAY
  < > : DIGITAL OUT switch
- Voltage variations may be noted due to normal production tolerances.

MOUNTING DIAGRAM

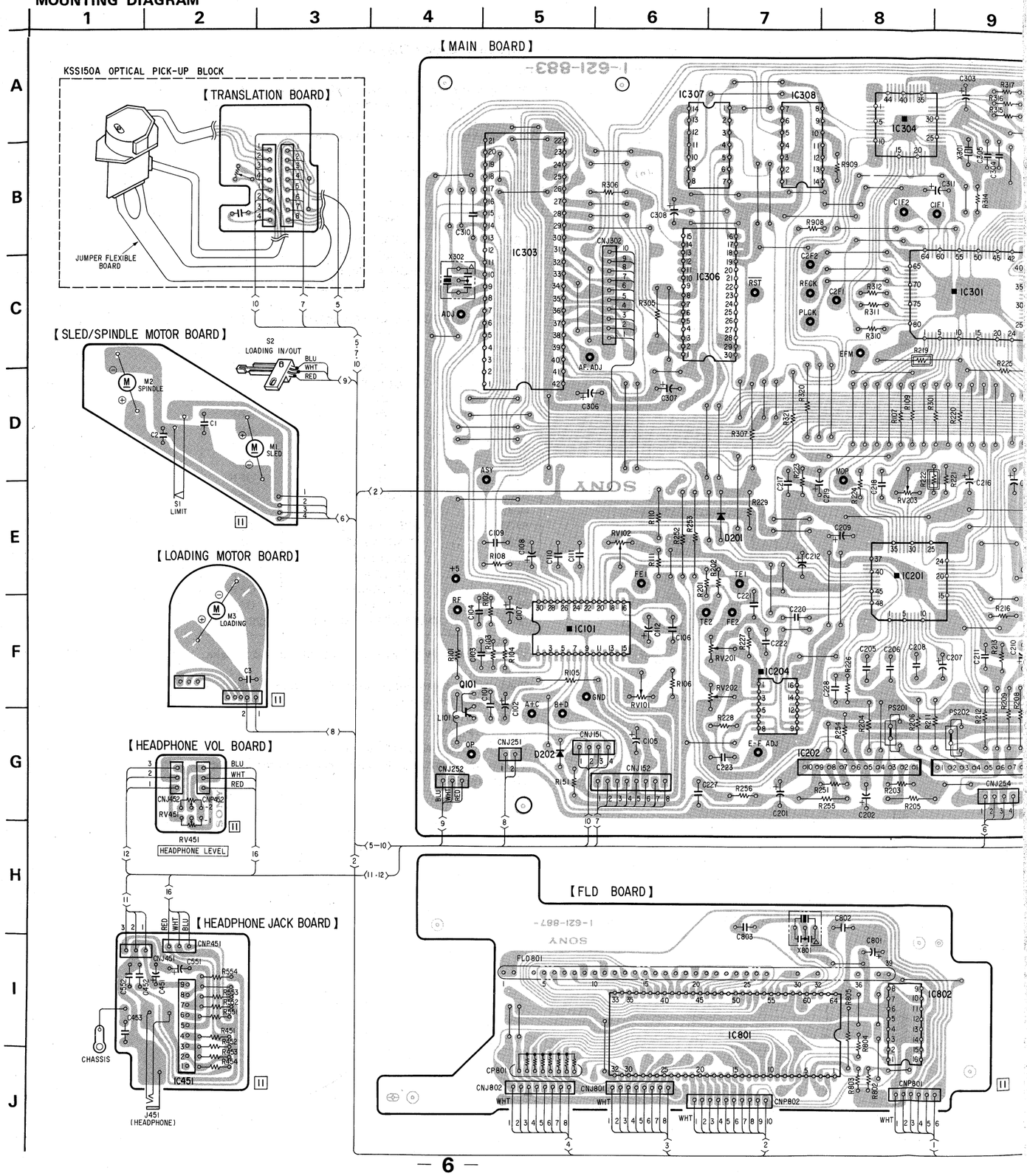
Note:

- Color code of sleeving over the end of the jacket.

- ○—— : parts extracted from the component side.
- ■ : part mounted on the conductor side.

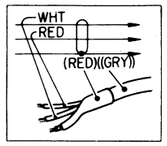


MOUNTING DIAGRAM



Note:

- Color code of sleeving over the end of the jacket.



- ○— : parts extracted from the component side.
- ■ : part mounted on the conductor side.

8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

A B C D E F G H I J

AEP, UK MODEL

【DIGITAL OUT BOARD】

【POWER SW BOARD】

AEP MODEL

UK MODEL

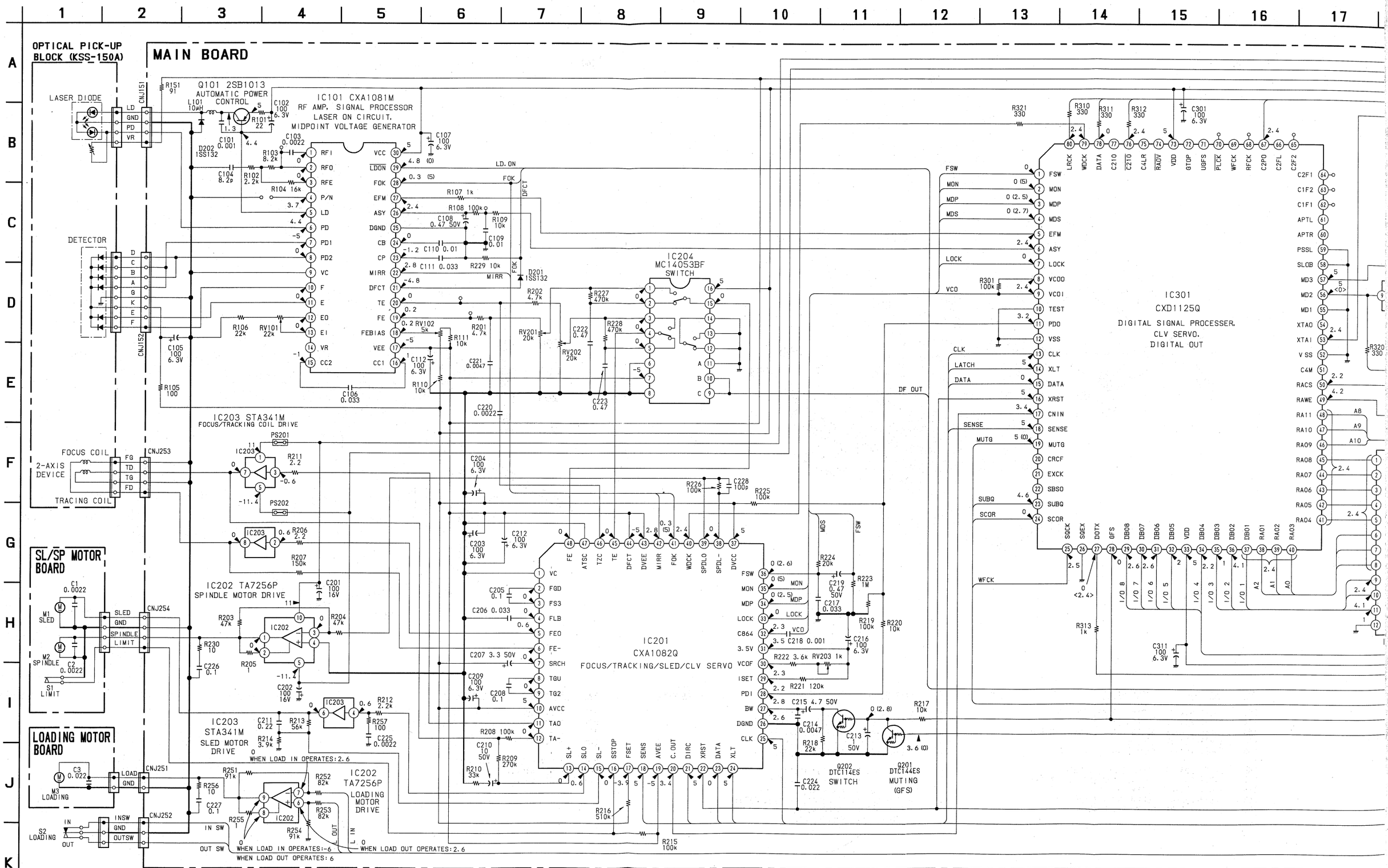
E MODEL

T901 POWER TRANSFORMER

VS901 VOLTAGE SELECTOR 220—240V → 110—120V

【FUNCTION BOARD】

CD SECTION SCHEMATIC DIAGRAM



12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

IC301
CXD1125Q
DIGITAL SIGNAL PROCESSER,
CLV SERVO,
DIGITAL OUT

IC304
CXD1088Q
DIGITAL FILTER

IC305
MC74HCOON
NAND

IC401, 501
PCM56P
D/A CONVERTER

IC401
IC501

IC402
NE5532P
AUDIO AMP

IC502
NE5532P
AUDIO AMP

Q401
2SC3624
EMPHAS

Q501

IC302 LC3516
2K-SRAM

IC303 MSM6404A
SYSTEM CONTROL

IC306
LC6523H
DEFECT CONTROL

IC307
MC74HC02M
NOR

IC308
TC04H004P
INVERTER

Q201
DTC144ES
MUTING
(GFS)

X301
16.93MHz

X302
4MHz

DISC TABLE
CLOSE: 3.2
OPEN: 0

DISC TABLE
CLOSE: 0
OPEN: 3.2

WHEN LOAD OUT OPERATES:5

WHEN LOAD IN OPERATES:5

TO FLD BOARD

CNJ301

CNJ302

CNJ702 IN

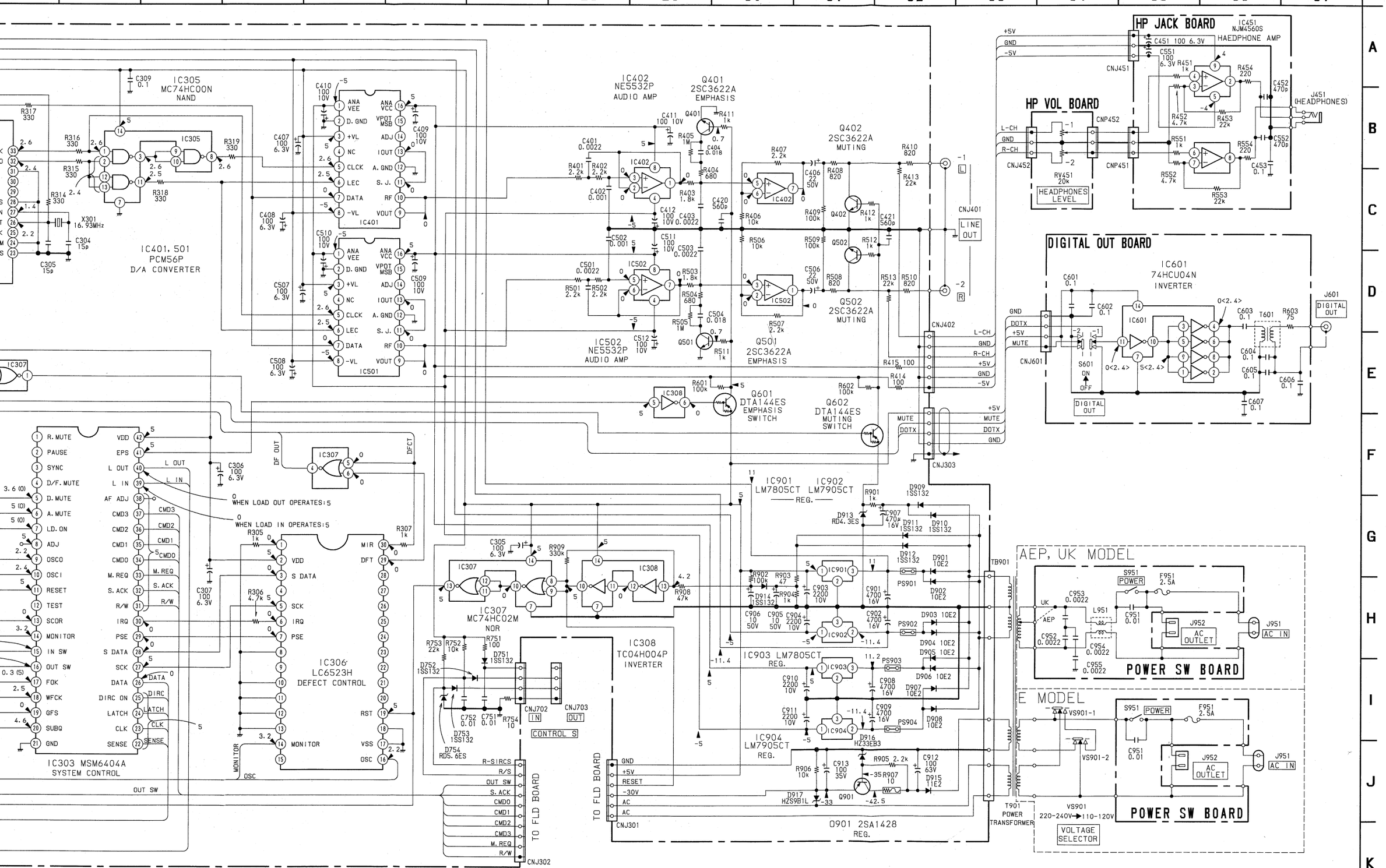
CNJ703 OUT

CONTROL S

— 10 —

— 11 —

— 12 —


IC305 MC74HCOON NAND
IC401, 501 PCM56P D/A CONVERTER
IC401
IC501
IC303 MSM6404A SYSTEM CONTROL
IC306 LC6523H DEFECT CONTROL
IC307 MC74HC02M NOR
IC308 TC04H004P INVERTER
IC402 NE5532P AUDIO AMP
IC502 NE5532P AUDIO AMP
Q401 2SC3622A EMPHASIS
Q402 2SC3622A MUTING
Q501 2SC3622A EMPHASIS
Q502 2SC3622A MUTING
Q601 DTA144ES EMPHASIS SWITCH
Q602 DTA144ES MUTING SWITCH
IC901 LM7805CT REG.
IC902 LM7905CT REG.
IC903 LM7805CT REG.
IC904 LM7905CT REG.
Q901 2SA1428 REG.
HP JACK BOARD
IC451 NJM4560S HAEDPHONE AMP
HP VOL BOARD
HEADPHONES LEVEL
DIGITAL OUT BOARD
IC601 74HCU04N INVERTER
AEP, UK MODEL
E MODEL
POWER SW BOARD
VOLTAGE SELECTOR
LINE OUT
CONTROL S
TO FLD BOARD
WHEN LOAD OUT OPERATES:5
WHEN LOAD IN OPERATES:5
X301 16.93MHz
J451 (HEADPHONES)
J601 DIGITAL OUT
J951 AC IN
T901 POWER TRANSFORMER
VS901 220-240V→110-120V

21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37

A B C D E F G H I J K

IC305 MC74HC00N NAND

IC401, 501 PCM56P D/A CONVERTER

IC401

IC501

IC303 MSM6404A SYSTEM CONTROL

IC306 LC6523H DEFECT CONTROL

IC307 MC74HC02M NOR

IC308 TC04H004P INVERTER

IC402 NE5532P AUDIO AMP

IC502 NE5532P AUDIO AMP

Q401 2SC3622A EMPHASIS

Q402 2SC3622A MUTING

Q501 2SC3622A EMPHASIS

Q502 2SC3622A MUTING

Q601 DTA144ES EMPHASIS SWITCH

Q602 DTA144ES MUTING SWITCH

Q901 2SA1428

IC901 LM7805CT REG.

IC902 LM7905CT REG.

IC903 LM7805CT REG.

IC904 LM7905CT REG.

HP JACK BOARD

IC451 NJM4560S HAEDPHONE AMP

HP VOL BOARD

DIGITAL OUT BOARD

IC601 74HCU04N INVERTER

AEP, UK MODEL

E MODEL

POWER SW BOARD

CONTROL S

TO FLD BOARD

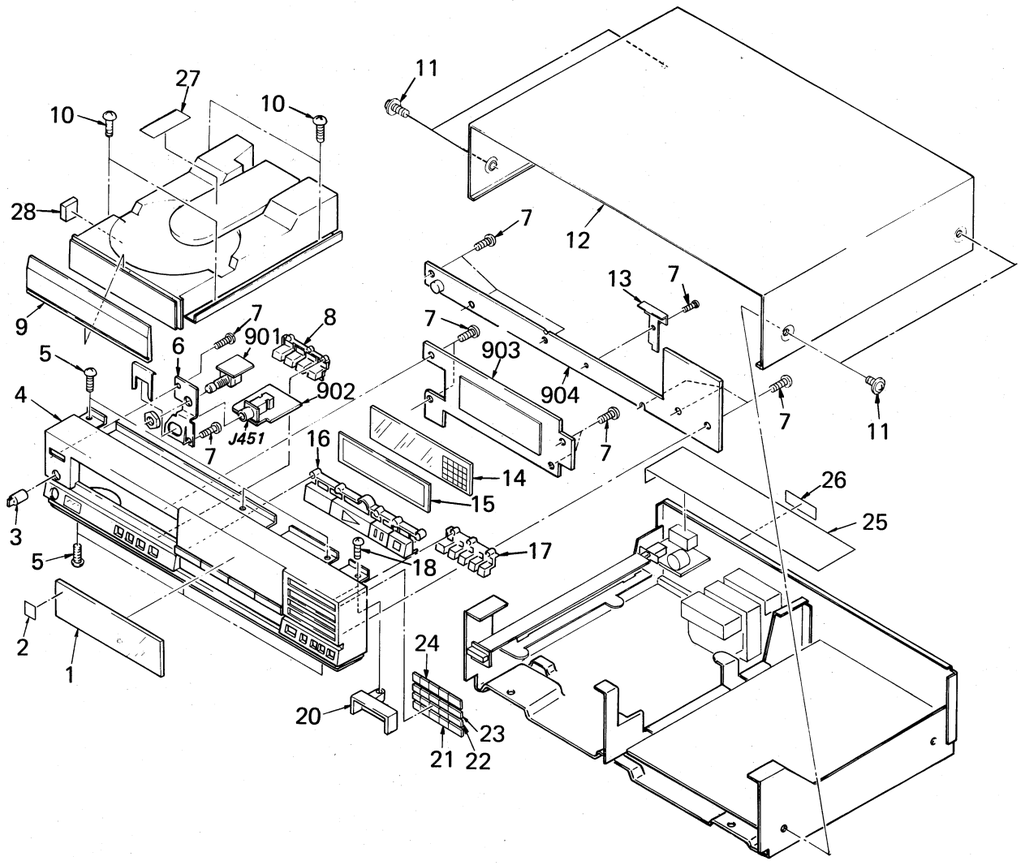
VOLTAGE SELECTOR

CDP-M70 CDP-M70

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Color Indication of Appearance Parts
  Example: (RED) ..... KNOB, BALANCE (WHITE)
  ↑ Cabinet's Color ↑ Parts' Color

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

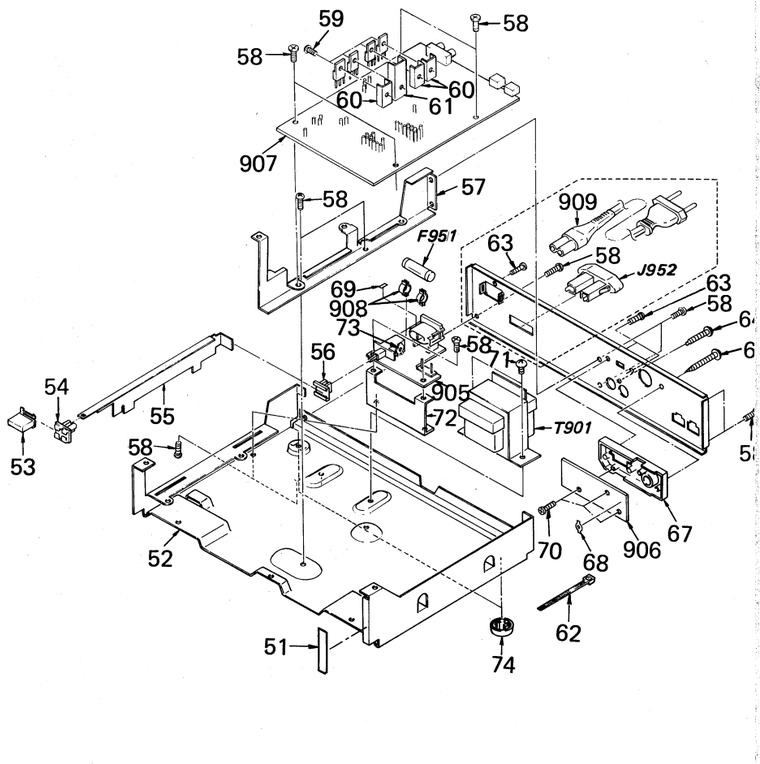
(1)



No.	Part No.	Description	Remarks
1	4-918-623-01	WINDOW	
2	3-703-713-41	STICKER, SONY SYMBOL (10)	
3	4-901-708-11	KNOB, VOL	
4	X-4917-520-1	FRONT PANEL ASSY	
5	7-685-872-01	SCREW +BVTT 3X8	
6	*4-918-624-01	BRACKET, VOL	
7	7-685-134-19	SCREW +BTP 2.6X8 TYPE 2 N-S	
8	4-918-635-01	BUTTON BLOCK (B)	
9	4-918-632-01	PANEL, LOADING	
10	7-685-871-01	SCREW +BVTT 3X6 (S)	
11	4-886-821-01	SCREW, M3 CASE	
12	4-918-639-01	CASE	
13	*4-918-662-01	STOPPER	
14	*4-918-119-01	FILTER	
15	*4-918-661-01	PLATE, SHIELD	
16	4-918-630-01	BUTTON BLOCK (C)	
17	4-918-628-01	BUTTON BLOCK (A)	

No.	Part No.	Description	Remarks
18	3-703-685-21	SCREW (+BV 3X8)	
19	7-685-646-79	SCREW +BVTP 3X8 TYPE 2 N-S	
20	*4-918-621-01	RETAINER, PC BOARD	
21	4-918-627-01	KEY BLOCK	
22	4-918-627-11	KEY BLOCK	
23	4-918-627-21	KEY BLOCK	
24	4-918-627-31	KEY BLOCK	
25	*4-918-665-01	COVER, POWER	
26	*4-885-838-00	LABEL, CLASS 1	
27	4-885-843-02	LABEL, CAUTION, LASER	
28	9-911-845-XX	CUSHION	
901	*1-621-884-11	PC BOARD, HEADPHONE VOL	
902	*1-621-885-11	PC BOARD, HEADPHONE JACK	
903	*1-621-887-11	PC BOARD, FLD	
904	*1-621-888-11	PC BOARD, FUNCTION	
J451	1-563-485-21	JACK, LARGE TYPE (HEADPHONES)	

(2)



No.	Part No.	Description	Remarks
51	*4-918-660-01	INSULATOR	
52	*4-917-321-01	CHASSIS, MAIN	
53	4-907-611-61	KNOB, POWER	
54	4-908-569-01	JOINT, SWITCH, POWER	
55	*4-918-631-01	JOINT, POWER SW	
56	4-866-342-00	JOINT (B), KNOB	
57	*4-917-319-01	CHASSIS, CENTER	
58	7-685-871-01	SCREW +BVTT 3X6 (S)	
59	2-259-121-00	SCREW, TR	
60	*3-309-144-01	HEAT SINK	
61	*4-886-555-00	HEAT SINK	
62	3-701-748-00	(UK)....CLAMP	
63	7-685-646-79	SCREW +BVTP 3X8 TYPE 2 N-S	
64	3-703-473-00	SCREW, TERMINAL	
65	4-904-486-01	SCREW (F.U), GROUND	
66	*4-918-637-01	(AEP)...PLATE, JACK	
	*4-918-637-11	(UK)....PLATE, JACK	
	*4-918-637-21	(E).....PLATE, JACK	
67	*4-912-940-01	ESCUTCHEON, D/O	
68	*4-918-668-01	BRACKET, GROUND	
69	3-701-948-18	LABEL, FUSE	
70	7-685-134-19	SCREW +BTP 2.6X8 TYPE 2 N-S	

No.	Part No.	Desc
71	7-685-880-01	SCRE
72	*4-918-626-01	BRAC
73	4-875-455-01	COVE
74	X-3701-069-0	FOOT
905	*1-621-889-11	PC E
906	*1-621-886-11	PC E
907	*A-4651-118-A	MOUN
908	*1-533-183-11	HOLD
909	⚠1-558-032-11	(UK)
	⚠1-558-833-11	(E).
	⚠1-558-835-11	(AEP
910	⚠1-526-565-00	(E)
F951	⚠ 1-532-286-00	FUS
J952	⚠1-526-751-00	(UK)
J952	⚠1-526-774-11	(E).
J952	⚠1-526-794-11	(AEP
T901	⚠1-448-795-11	(AEP
T901	⚠1-448-796-11	(E).
VS901	1-570-046-11	(E).

tified
⚠ are
art

11

25

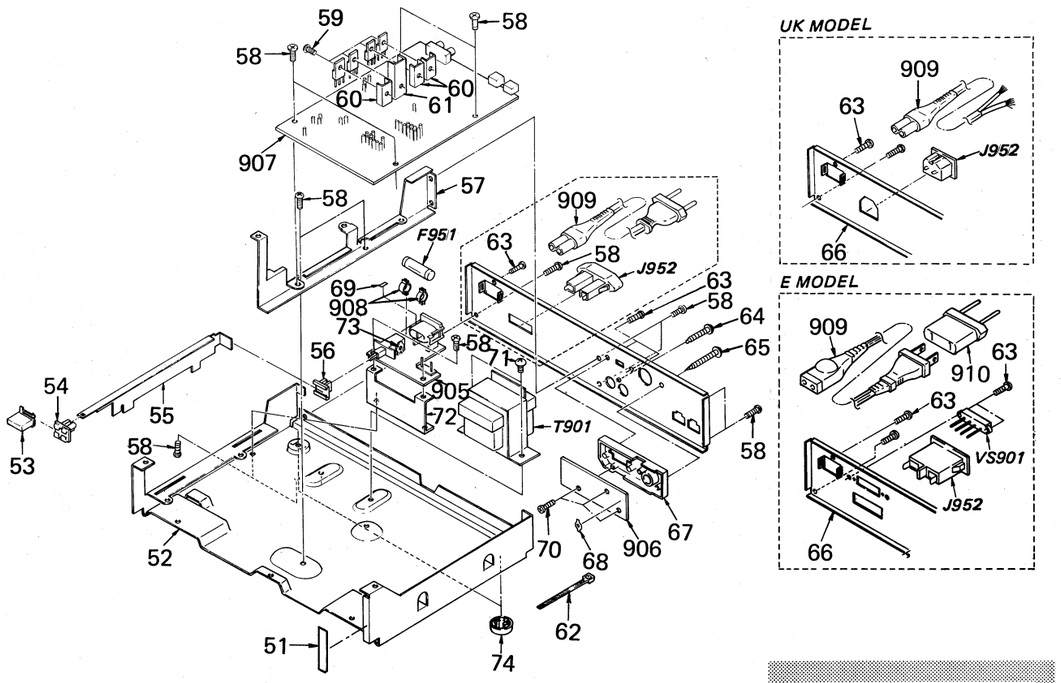
2 N-S

R

VOL
JACK

ADPHONES)

(2)



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No.	Part No.	Description	Remarks
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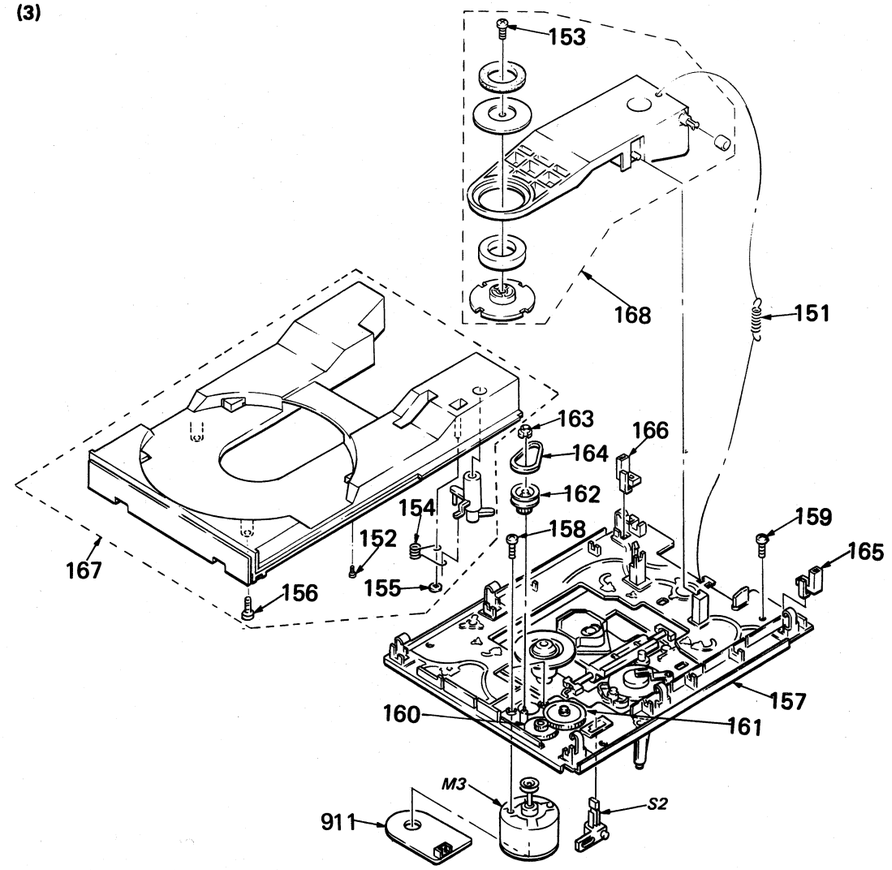
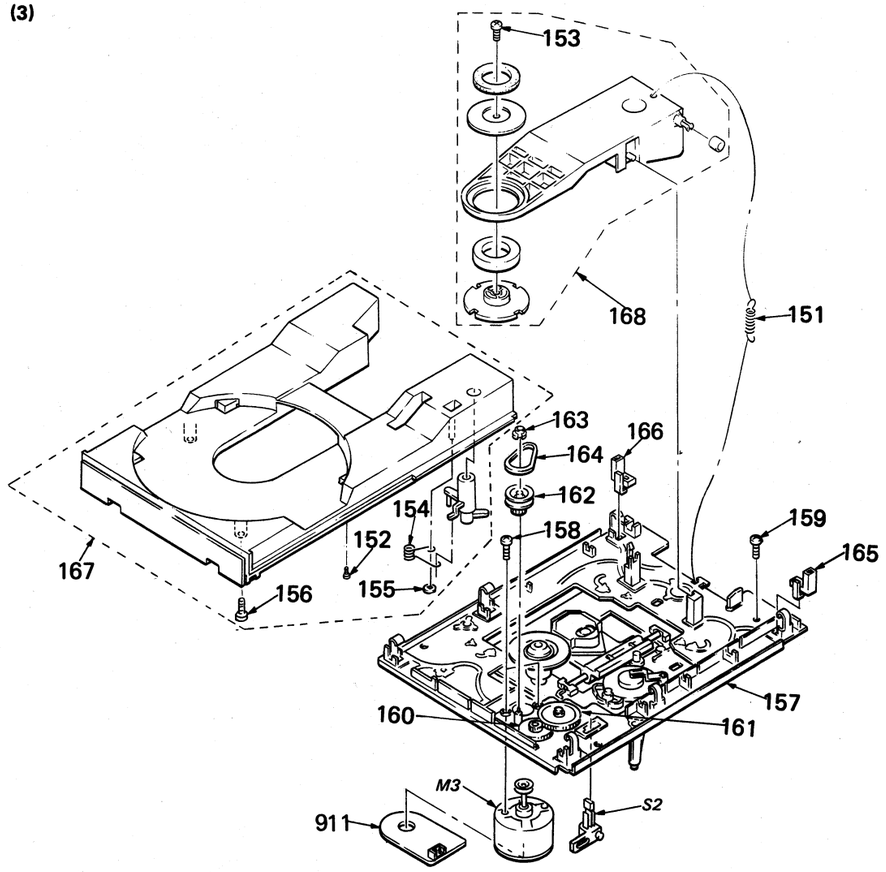
52	*4-917-321-01	CHASSIS, MAIN	
53	4-907-611-61	KNOB, POWER	
54	4-908-569-01	JOINT, SWITCH, POWER	
55	*4-918-631-01	JOINT, POWER SW	
56	4-866-342-00	JOINT (B), KNOB	
57	*4-917-319-01	CHASSIS, CENTER	
58	7-685-871-01	SCREW +BVTT 3X6 (S)	
59	2-259-121-00	SCREW, TR	
60	*3-309-144-01	HEAT SINK	
61	*4-886-555-00	HEAT SINK	
62	3-701-748-00	(UK)....CLAMP	
63	7-685-646-79	SCREW +BVTP 3X8 TYPE 2 N-S	
64	3-703-473-00	SCREW, TERMINAL	
65	4-904-486-01	SCREW (F.U), GROUND	
66	*4-918-637-01	(AEP)...PLATE, JACK	
	*4-918-637-11	(UK)....PLATE, JACK	
	*4-918-637-21	(E).....PLATE, JACK	
67	*4-912-940-01	ESCUTCHEON, D/O	
68	*4-918-668-01	BRACKET, GROUND	
69	3-701-948-18	LABEL, FUSE	
70	7-685-134-19	SCREW +BTP 2.6X8 TYPE 2 N-S	
71	7-685-880-01	SCREW +BVTT 4X6 (S)	
72	*4-918-626-01	BRACKET, POWER SW	
73	4-875-455-01	COVER (DIA. 20), CAPACITOR	
74	X-3701-069-0	FOOT ASSY, M.F	
905	*1-621-889-11	PC BOARD, POWER SW	
906	*1-621-886-11	PC BOARD, DIGITAL OUT	
907	*A-4651-118-A	MOUNTED PCB, MAIN	
908	*1-533-183-11	HOLDER, FUSE	
909	⚠ 1-558-032-11	(UK)....CORD, POWER	
	⚠ 1-558-833-11	(E).....CORD, POWER	
	⚠ 1-558-835-11	(AEP)...CORD, POWER	
910	⚠ 1-526-565-00	(E)....AC PLUG ADAPTOR	
F951	⚠ 1-532-286-00	FUSE,TIME-LAG (2.5A)	
J952	⚠ 1-526-751-00	(UK)....OUTLET, AC	
J952	⚠ 1-526-774-11	(E).....OUTLET, AC	
J952	⚠ 1-526-794-11	(AEP)...OUTLET, AC	
T901	⚠ 1-448-795-11	(AEP,UK)...TRANSFORMER, POWER	
T901	⚠ 1-448-796-11	(E).....TRANSFORMER, POWER	
VS901	1-570-046-11	(E).....SWITCH, VOLTAGE CHANGE	

(3)



No.	Part No.	Description	Remarks
151	4-917-551-01	SPRING (ARM), TENSION	
152	7-687-203-11	+PTPWH 2X5	
153	7-685-132-19	SCREW +BTP 2.6X5 TYPE2 N-S	
154	4-917-552-01	SPRING	
155	7-624-190-81	STOP RING 2, TYPE-CS	
156	7-685-103-14	SCREW (2X5), + PWTP	
157	4-917-561-11	CHASSIS (OUTSERT), LOADING	
158	7-621-775-40	SCREW +B 2.6X8	
159	7-685-793-04	SCREW +BVTT 2.6X8 (S)	
160	4-910-402-01	GEAR (2), LOADING	
161	4-917-550-01	GEAR (A), LOADING	
162	4-917-546-01	PULLEY (A), LOADING	
163	4-910-418-01	BUSHING (DIA. 4)	
164	4-917-548-01	BELT, DRIVING	
165	*4-918-613-01	CUSHION (RIGHT)	
166	*4-918-612-01	CUSHION (LEFT)	
167	A-4665-013-A	TABLE ASSY, DISK	
168	A-4681-006-A	ARM ASSY, CHUCKING	
911	*1-620-098-11	PC BOARD, LOADING MOTOR	
M3	A-4608-320-A	MOTOR ASSY, L	
S2	1-570-203-11	SWITCH, LEAF	

(3)



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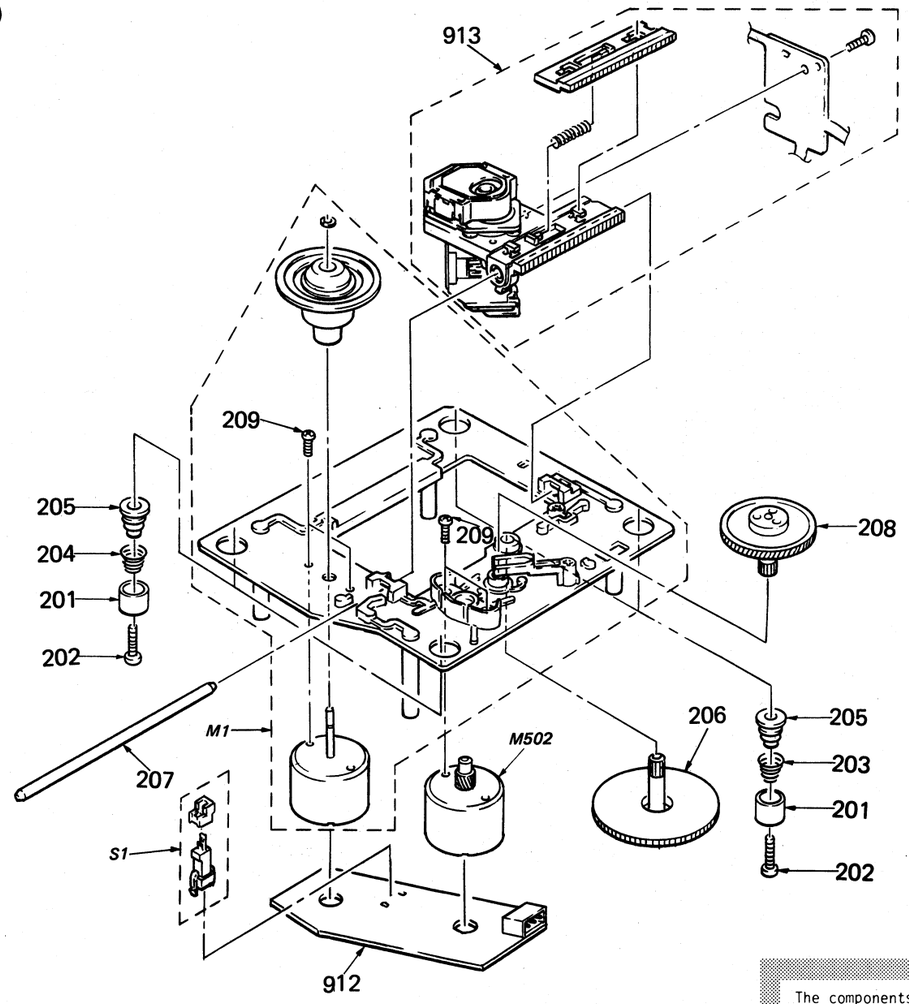

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155	7-624-190-81	STOP RING 2, TYPE-CS	
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157	4-917-561-11	CHASSIS (OUTSERT), LOADING	
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165	*4-918-613-01	CUSHION (RIGHT)	
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168	A-4681-006-A	ARM ASSY, CHUCKING	
911	*1-620-098-11	PC BOARD, LOADING MOTOR	
M3	A-4608-320-A	MOTOR ASSY, L	
S2	1-570-203-11	SWITCH, LEAF	
201	4-917-508-01	HOLDER, SP	
202	7-685-535-19	SCREW +BTP 2.6X10 TYPE2 N-S	
203	4-917-507-01	SPRING (H)	
204	4-917-541-01	SPRING (B)	
205	4-917-562-01	INSULATOR	
206	4-917-564-11	GEAR (P)	
207	4-917-565-01	SHAFT, SLED	
208	4-917-567-01	GEAR (M)	
209	7-621-255-15	SCREW +P 2X3	
912	*1-620-097-11	PC BOARD SL/SP MOTOR	
913	⚠ X-4917-051-1	DEVICE,OPTICS(KSS-150A)	
M1	X-4917-505-1	ASSY, MOTOR (SPINDLE)	
M2	X-4917-504-1	ASSY, MOTOR (SLED)	
S1	1-570-822-11	SWITCH, LEAF	

9-952-654-11

Sony Corporation
Audio Group

English
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